20020820 TEPH2007

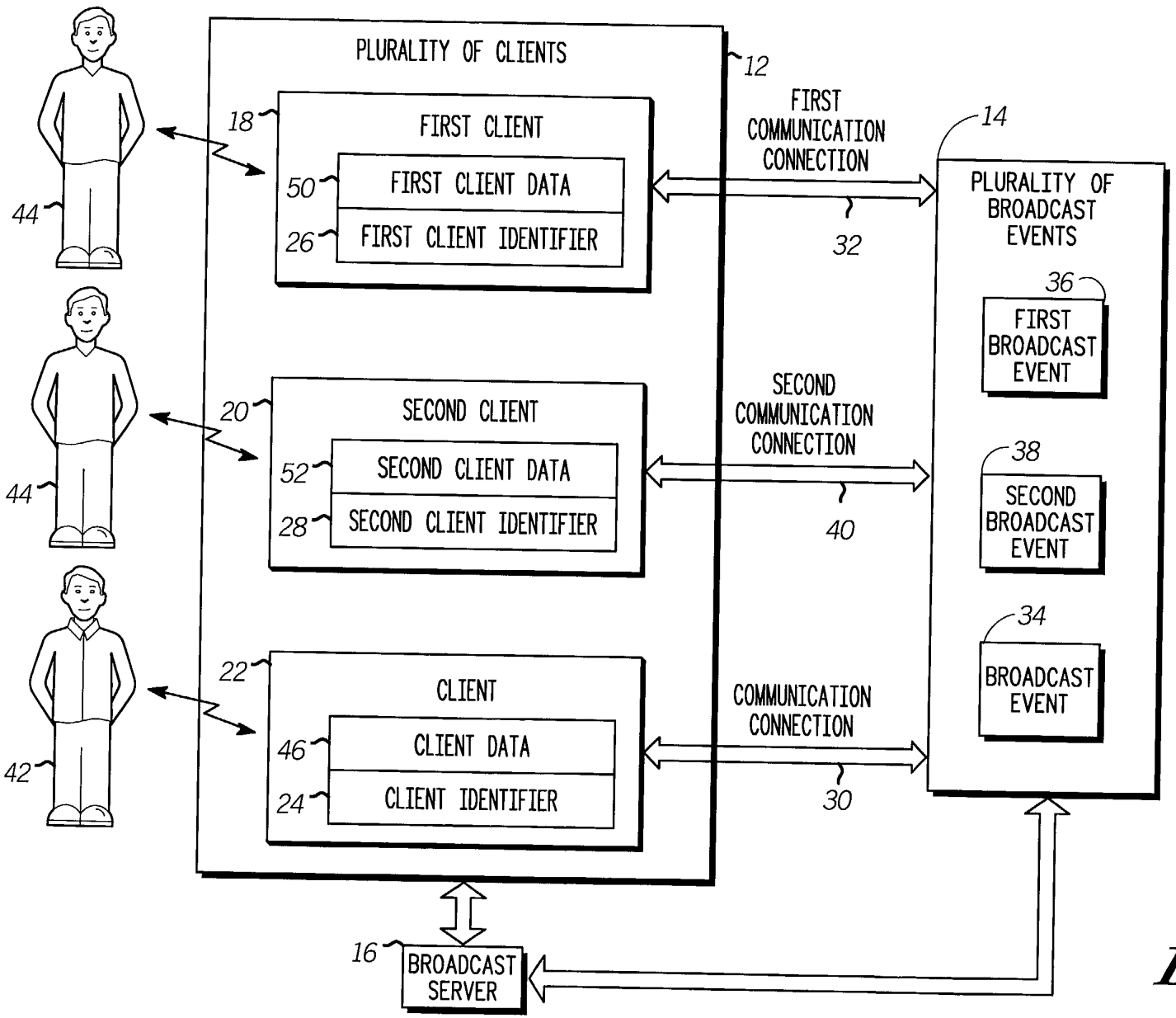

FIG. 1

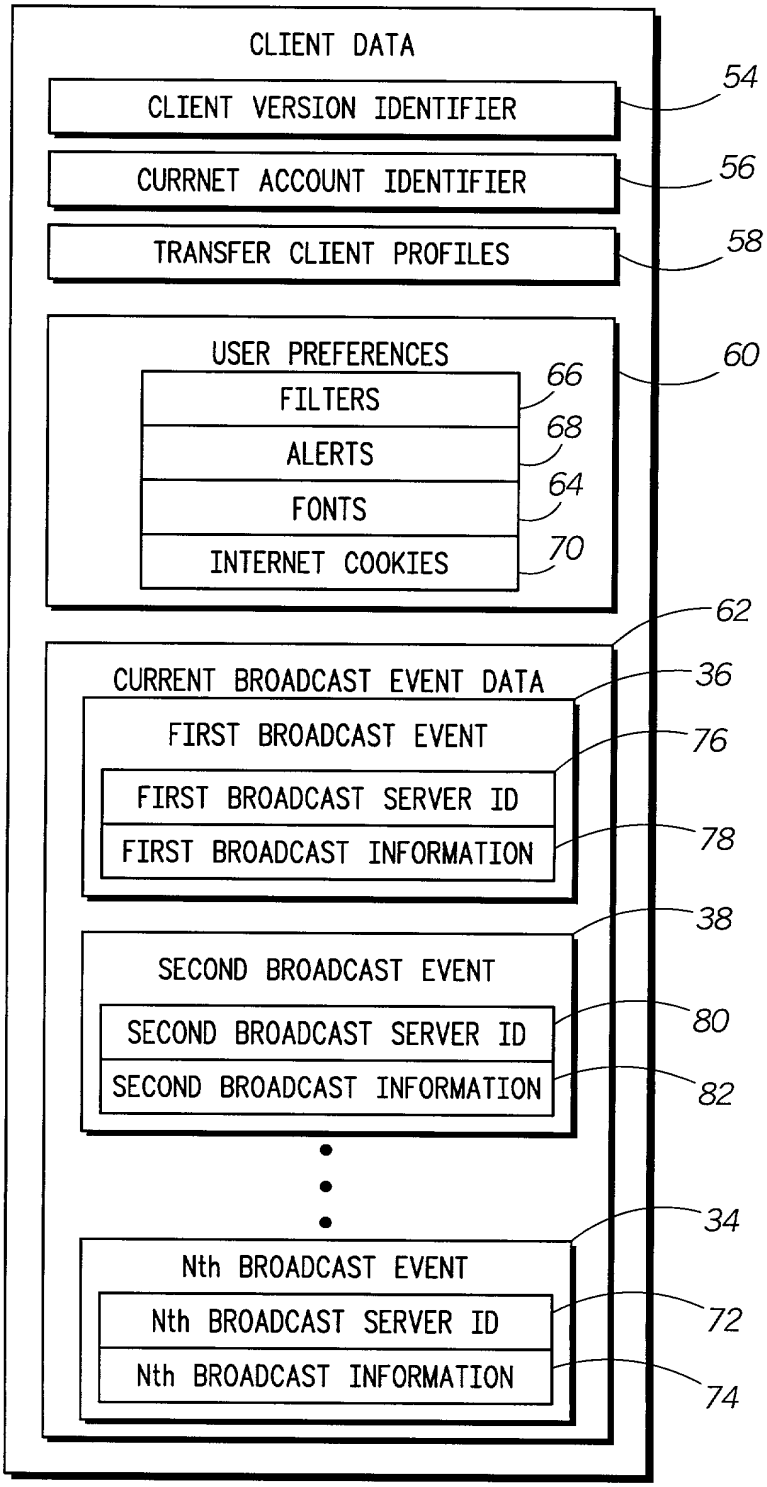
CLIENT DATA
CLIENT VERSION IDENTIFIER
54
CURRNET ACCOUNT IDENTIFIER
56
TRANSFER CLIENT PROFILES
58
USER PREFERENCES
60
FILTERS
66
ALERTS
68
FONTS
64
INTERNET COOKIES
70
62
CURRENT BROADCAST EVENT DATA
36
FIRST BROADCAST EVENT
76
FIRST BROADCAST SERVER ID
FIRST BROADCAST INFORMATION
78
38
SECOND BROADCAST EVENT
SECOND BROADCAST SERVER ID
80
SECOND BROADCAST INFORMATION
82
34
Nth BROADCAST EVENT
Nth BROADCAST SERVER ID
72
Nth BROADCAST INFORMATION
74
46

FIG.2

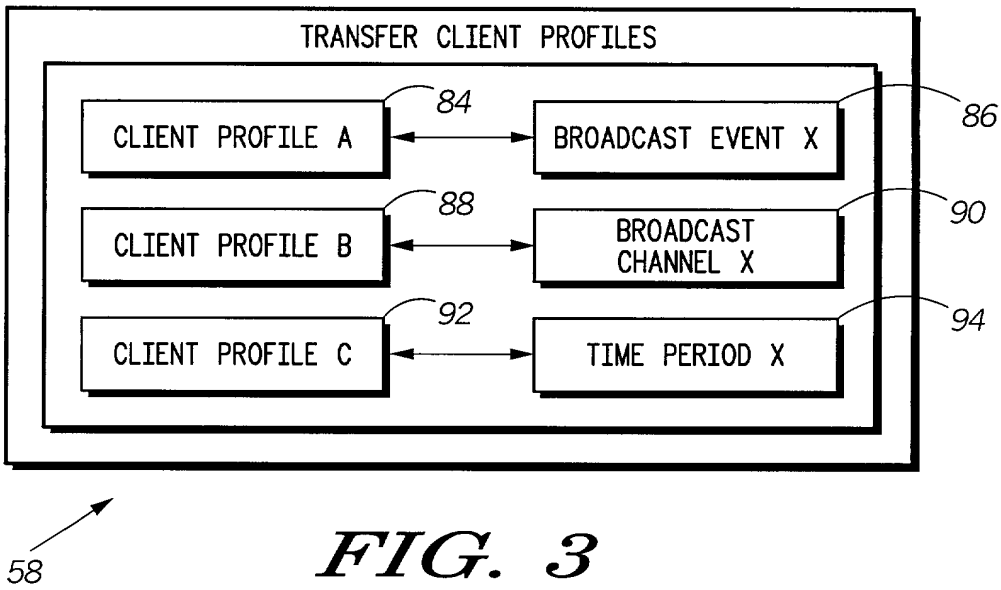
TRANSFER CLIENT PROFILES
CLIENT PROFILE A
84
BROADCAST EVENT X
86
CLIENT PROFILE B
88
BROADCAST CHANNEL X
90
CLIENT PROFILE C
92
TIME PERIOD X
94
58

FIG. 3

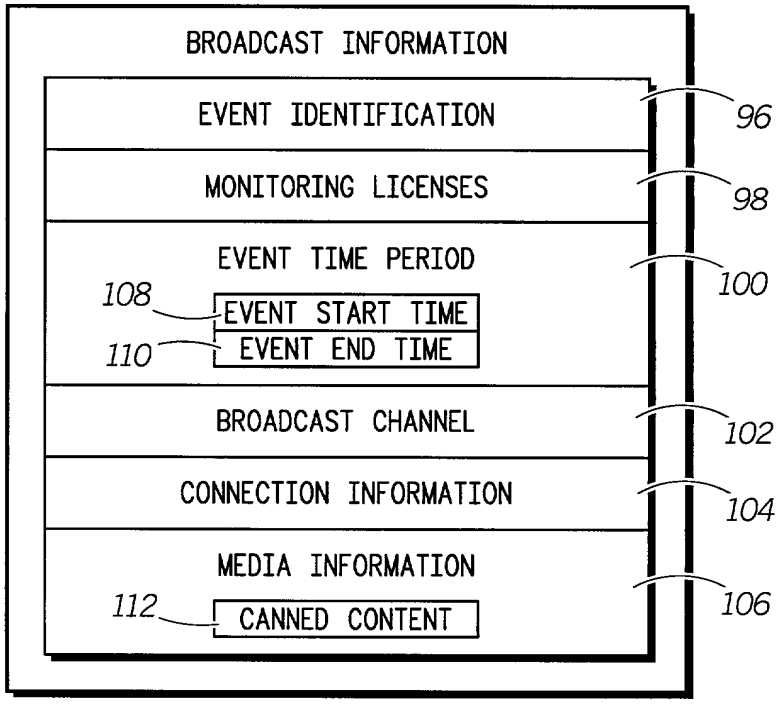
BROADCAST INFORMATION
EVENT IDENTIFICATION
96
MONITORING LICENSES
98
EVENT TIME PERIOD
100
108
EVENT START TIME
110
EVENT END TIME
BROADCAST CHANNEL
102
CONNECTION INFORMATION
104
MEDIA INFORMATION
106
112
CANNED CONTENT
74

FIG. 4

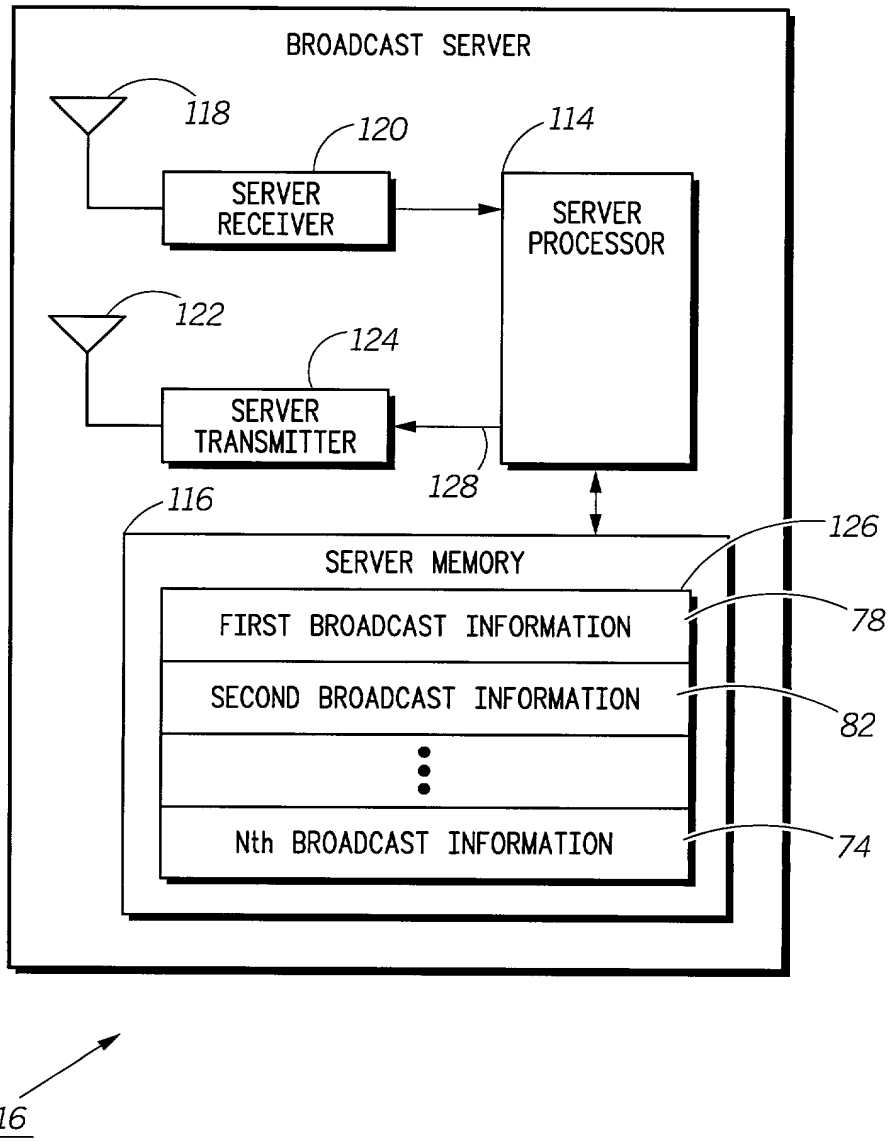
BROADCAST SERVER
118
120
114
SERVER RECEIVER
SERVER PROCESSOR
122
124
SERVER TRANSMITTER
128
116
126
SERVER MEMORY
FIRST BROADCAST INFORMATION
78
SECOND BROADCAST INFORMATION
82
Nth BROADCAST INFORMATION
74
16

FIG. 5

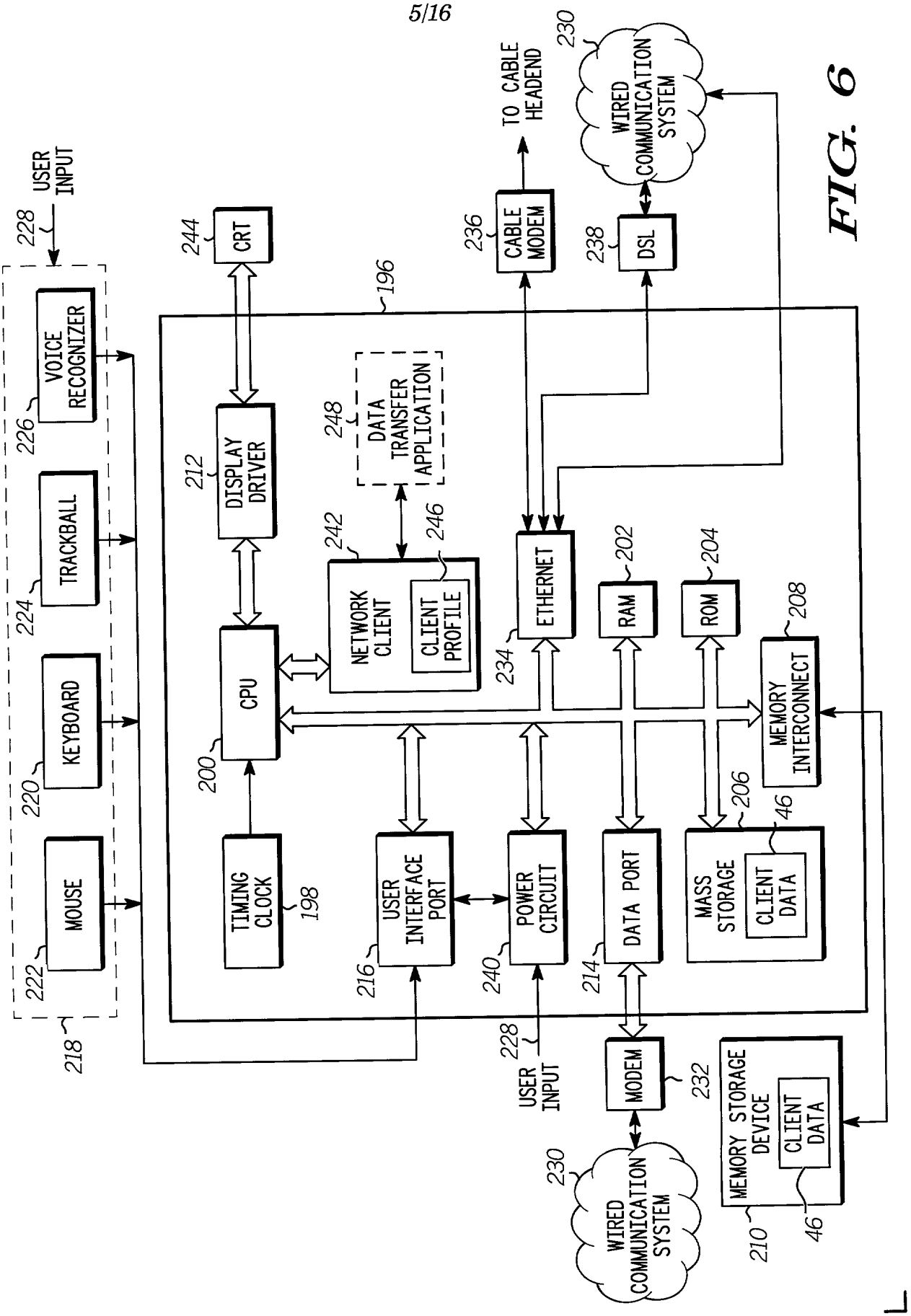
USER INPUT
228
VOICE RECOGNIZER
226
TRACKBALL
224
KEYBOARD
220
MOUSE
222
218
244
CRT
212
DISPLAY DRIVER
196
248
DATA TRANSFER APPLICATION
242
246
NETWORK CLIENT
CLIENT PROFILE
200
CPU
198
TIMING CLOCK
216
USER INTERFACE PORT
240
POWER CIRCUIT
214
DATA PORT
206
MASS STORAGE
CLIENT DATA
46
234
ETHERNET
202
RAM
204
ROM
208
MEMORY INTERCONNECT
236
CABLE MODEM
TO CABLE HEADEND
238
DSL
230
WIRED COMMUNICATION SYSTEM
228
USER INPUT
232
MODEM
230
WIRED COMMUNICATION SYSTEM
210
MEMORY STORAGE DEVICE
CLIENT DATA
46

FIG. 6

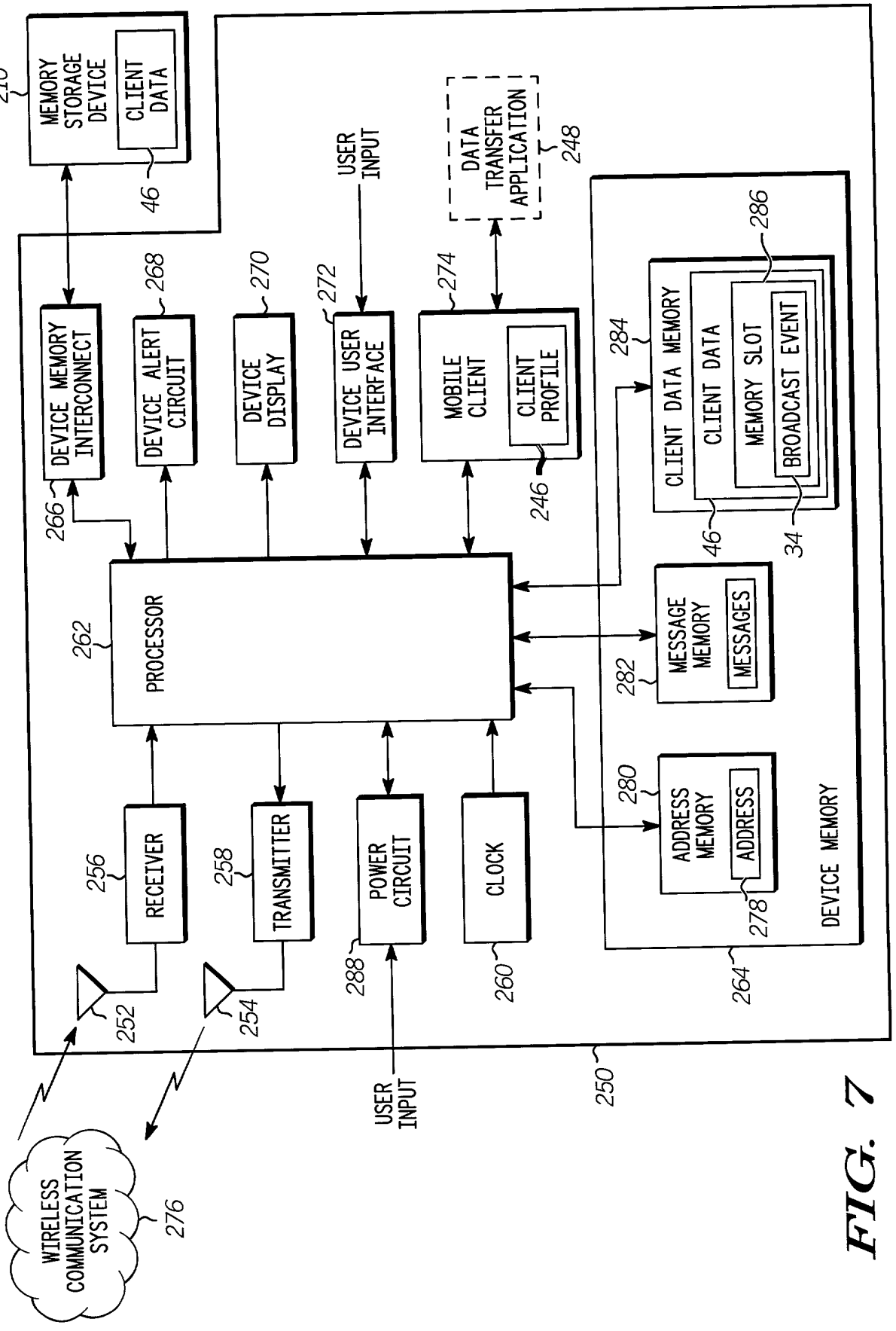
210
MEMORY STORAGE DEVICE
CLIENT DATA
46
DEVICE MEMORY INTERCONNECT
266
DEVICE ALERT CIRCUIT
268
DEVICE DISPLAY
270
DEVICE USER INTERFACE
272
USER INPUT
MOBILE CLIENT
CLIENT PROFILE
246
274
DATA TRANSFER APPLICATION
248
CLIENT DATA MEMORY
284
CLIENT DATA
MEMORY SLOT
BROADCAST EVENT
286
46
34
PROCESSOR
262
MESSAGE MEMORY
MESSAGES
282
ADDRESS MEMORY
ADDRESS
280
278
DEVICE MEMORY
264
RECEIVER
256
TRANSMITTER
258
POWER CIRCUIT
288
CLOCK
260
252
254
USER INPUT
250
WIRELESS COMMUNICATION SYSTEM
276

FIG. 7

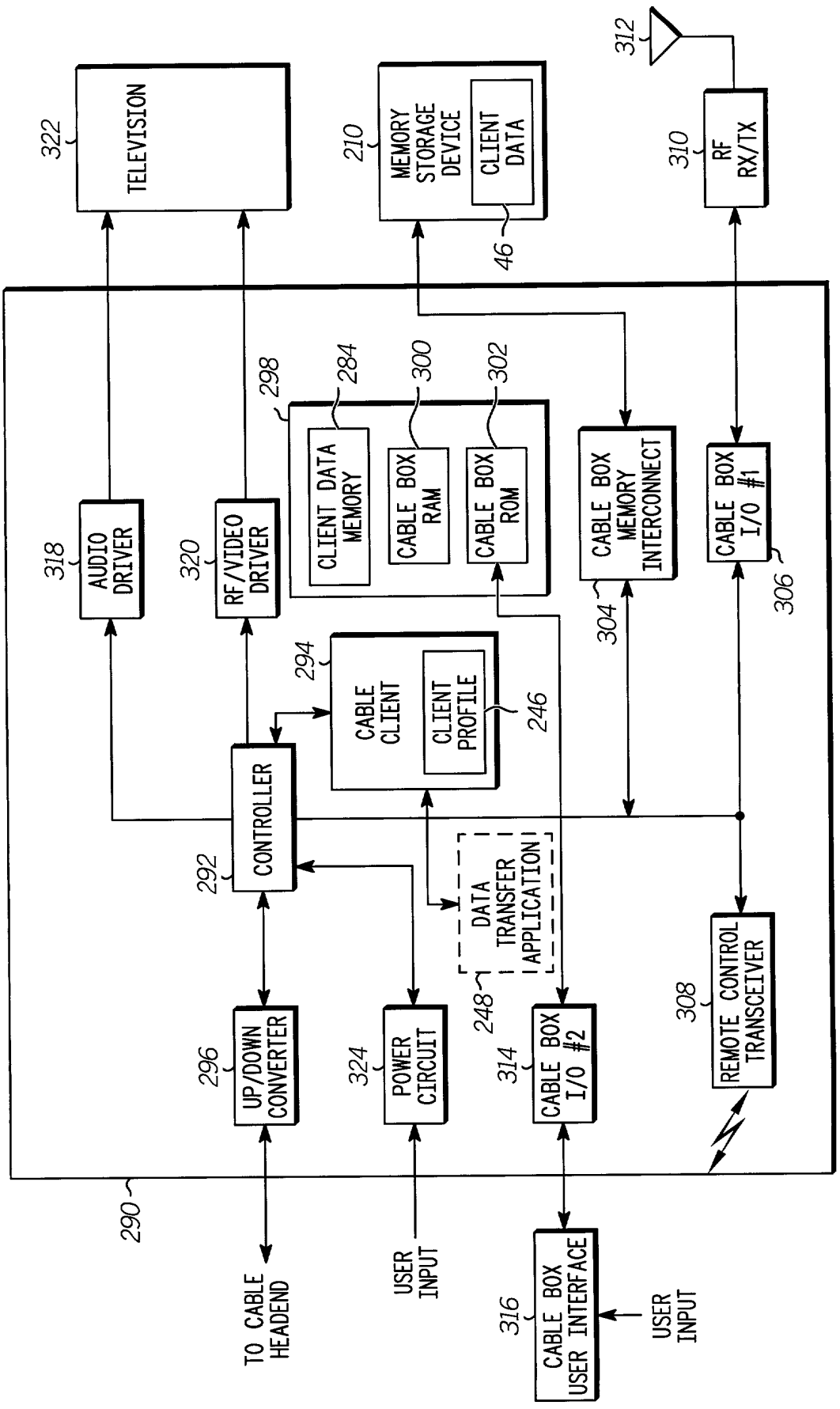
322
TELEVISION
210
MEMORY STORAGE DEVICE
CLIENT DATA
46
312
310
RF RX/TX
298
284
300
302
CLIENT DATA MEMORY
CABLE BOX RAM
CABLE BOX ROM
CABLE BOX MEMORY INTERCONNECT
CABLE BOX I/O #1
306
304
318
AUDIO DRIVER
320
RF/VIDEO DRIVER
294
CABLE CLIENT
CLIENT PROFILE
246
CONTROLLER
292
DATA TRANSFER APPLICATION
248
REMOTE CONTROL TRANSCEIVER
308
296
UP/DOWN CONVERTER
324
POWER CIRCUIT
314
CABLE BOX I/O #2
290
TO CABLE HEADEND
USER INPUT
316
CABLE BOX USER INTERFACE
USER INPUT

FIG. 8

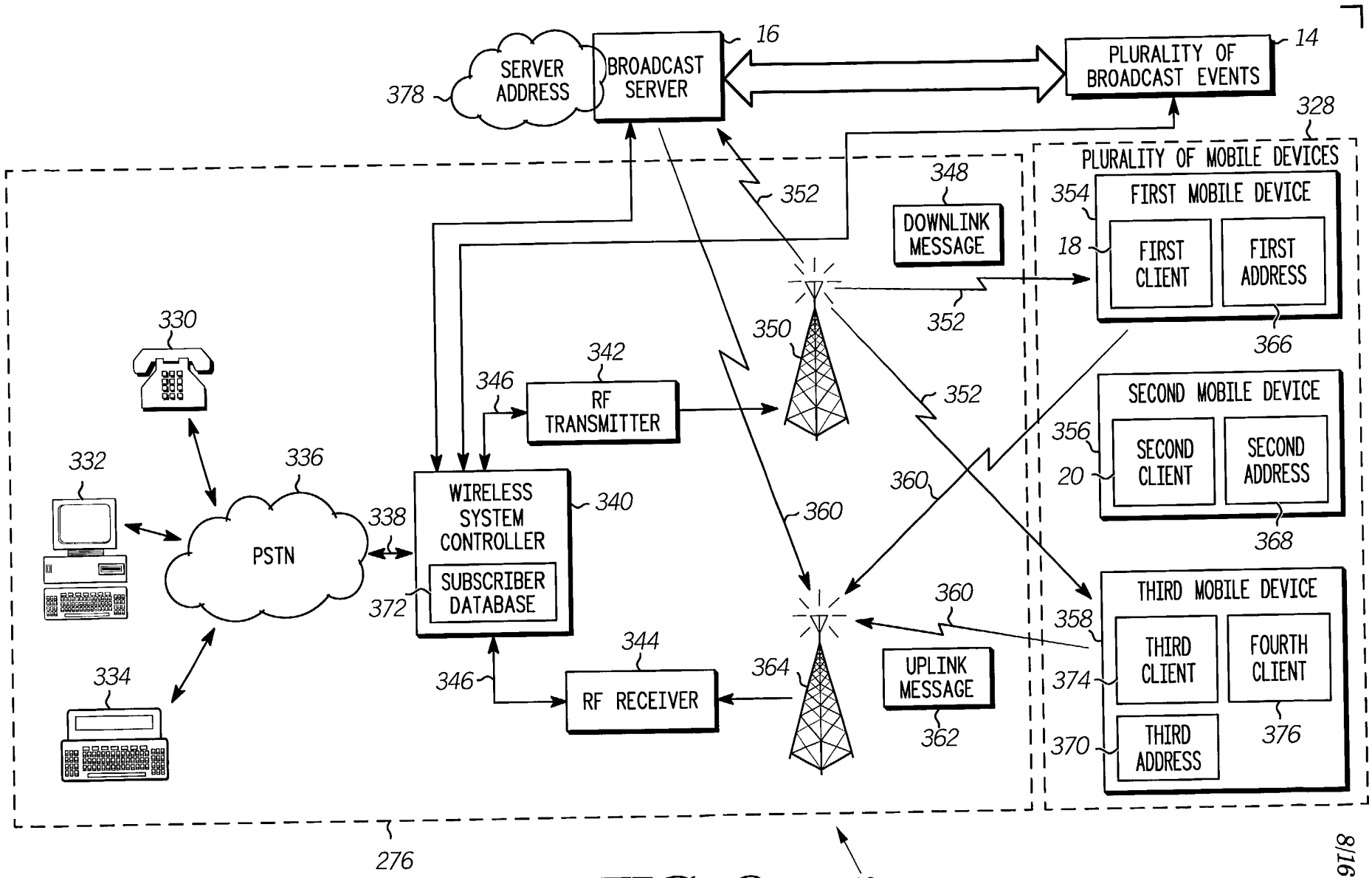
SERVER ADDRESS
BROADCAST SERVER
16
14
PLURALITY OF BROADCAST EVENTS
378
328
PLURALITY OF MOBILE DEVICES
348
DOWNLINK MESSAGE
352
354
FIRST MOBILE DEVICE
18
FIRST CLIENT
FIRST ADDRESS
366
350
330
342
346
RF TRANSMITTER
SECOND MOBILE DEVICE
356
20
SECOND CLIENT
SECOND ADDRESS
368
332
336
PSTN
338
WIRELESS SYSTEM CONTROLLER
340
SUBSCRIBER DATABASE
372
360
THIRD MOBILE DEVICE
358
THIRD CLIENT
FOURTH CLIENT
374
376
THIRD ADDRESS
370
334
344
346
RF RECEIVER
364
UPLINK MESSAGE
362
276
10

FIG. 9

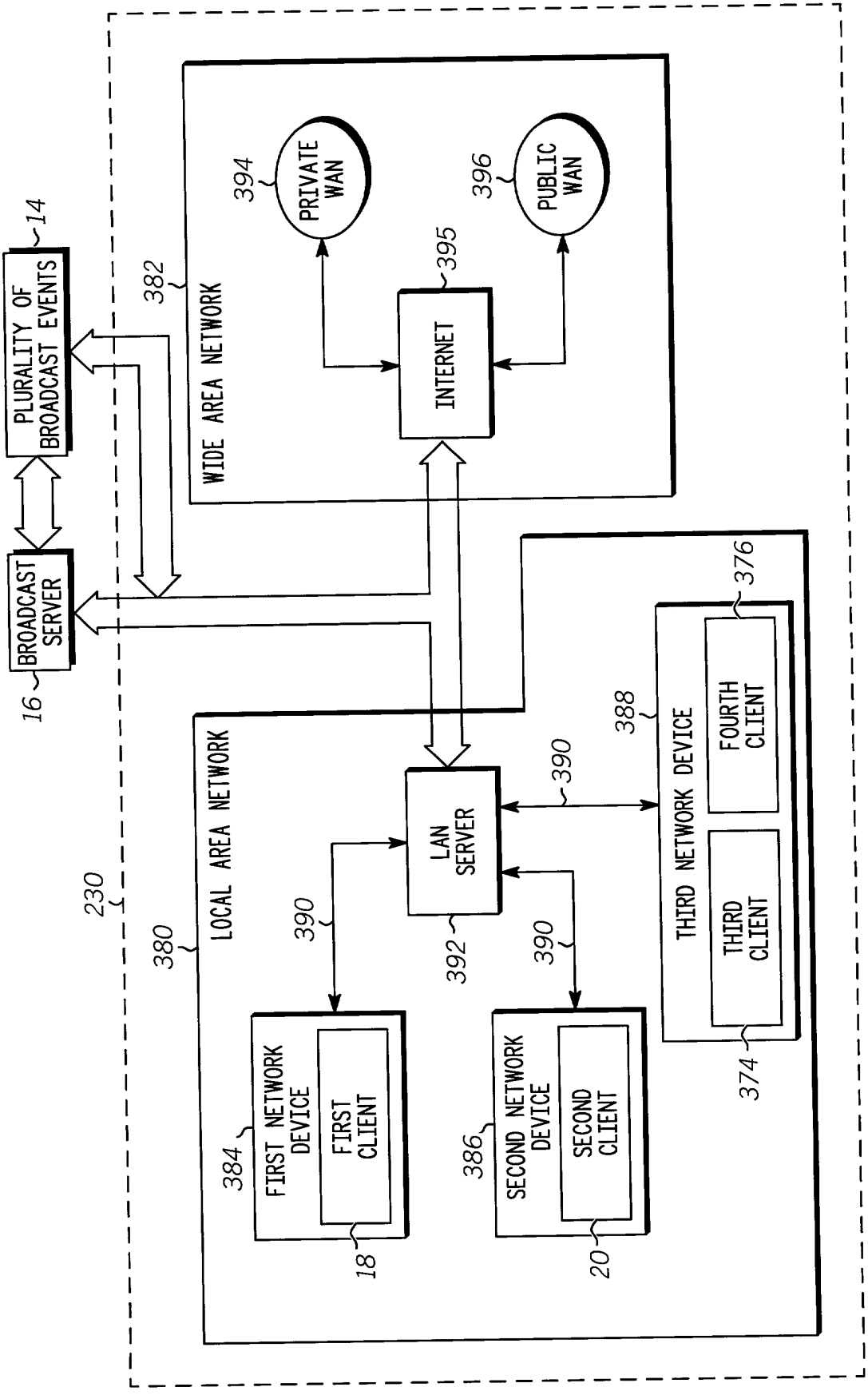
PLURALITY OF BROADCAST EVENTS
14
BROADCAST SERVER
16
WIDE AREA NETWORK
382
PRIVATE WAN
394
PUBLIC WAN
396
INTERNET
395
230
LOCAL AREA NETWORK
380
LAN SERVER
392
390
390
390
THIRD NETWORK DEVICE
388
FOURTH CLIENT
376
THIRD CLIENT
374
FIRST NETWORK DEVICE
384
FIRST CLIENT
18
SECOND NETWORK DEVICE
386
SECOND CLIENT
20
10

FIG. 10

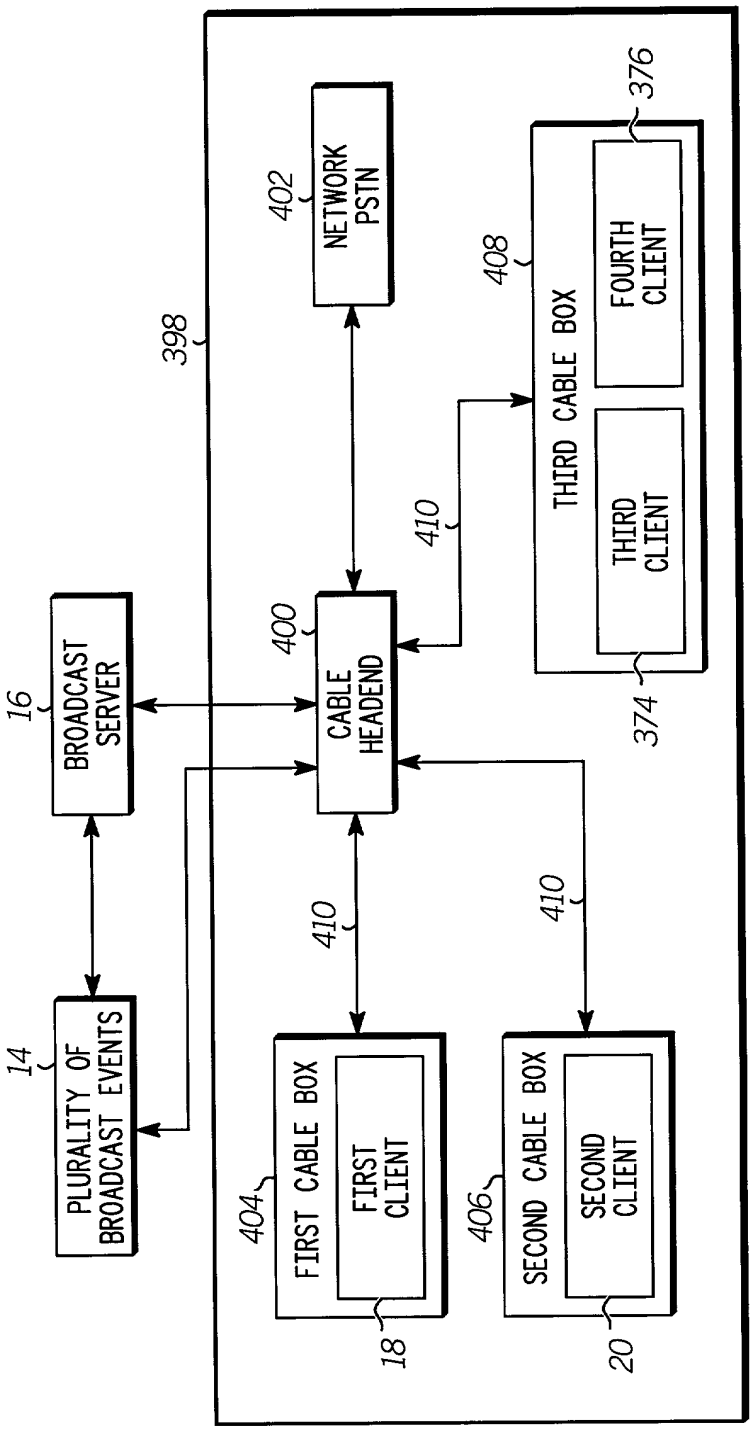
398
402
NETWORK PSTN
408
376
FOURTH CLIENT
THIRD CABLE BOX
THIRD CLIENT
374
410
400
CABLE HEADEND
16
BROADCAST SERVER
14
PLURALITY OF BROADCAST EVENTS
410
410
404
FIRST CABLE BOX
FIRST CLIENT
18
406
SECOND CABLE BOX
SECOND CLIENT
20
10

FIG. 11

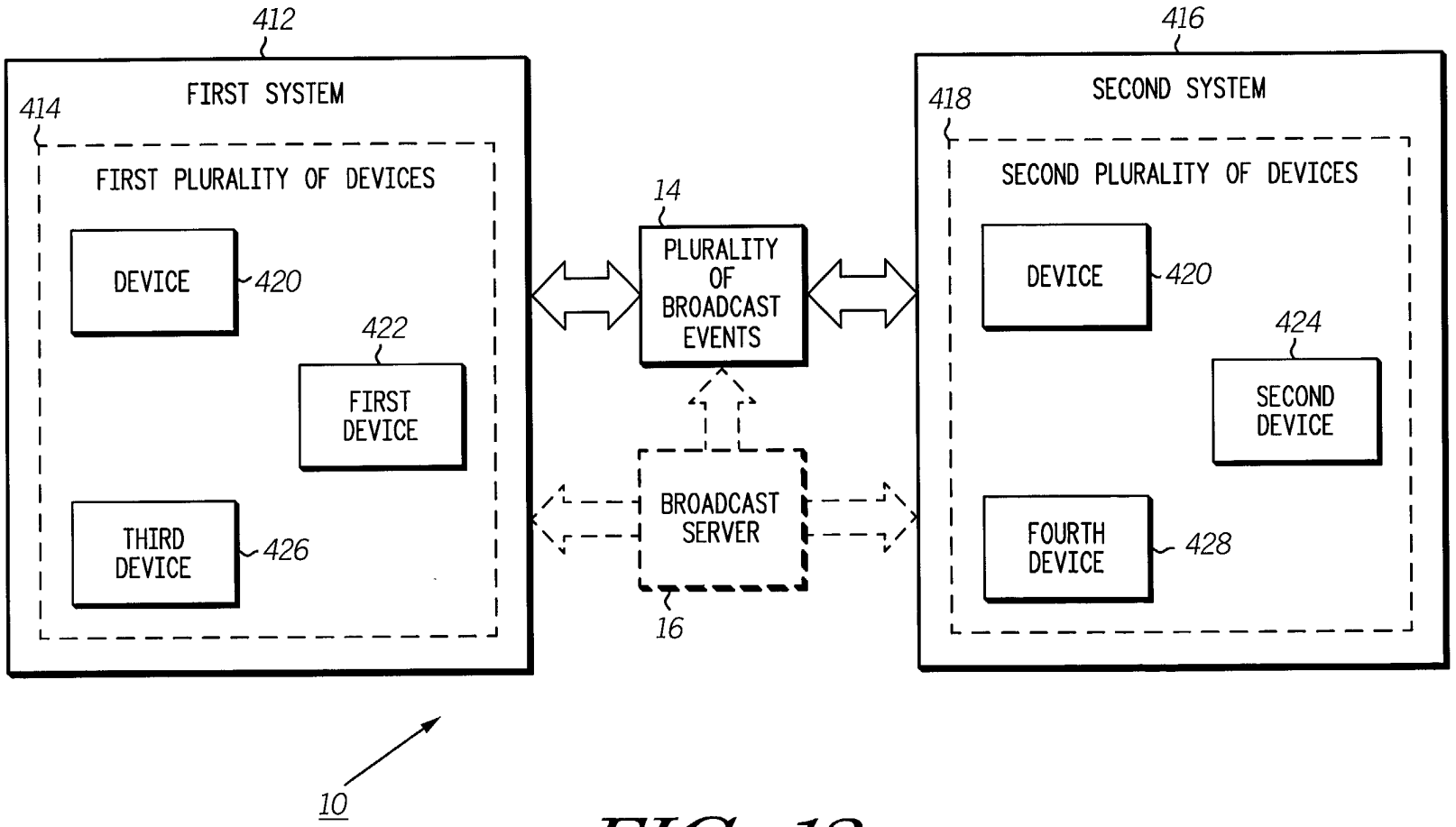
412
FIRST SYSTEM
414
FIRST PLURALITY OF DEVICES
DEVICE
420
422
FIRST DEVICE
THIRD DEVICE
426
14
PLURALITY OF BROADCAST EVENTS
BROADCAST SERVER
16
416
SECOND SYSTEM
418
SECOND PLURALITY OF DEVICES
DEVICE
420
424
SECOND DEVICE
FOURTH DEVICE
428
10

FIG. 12

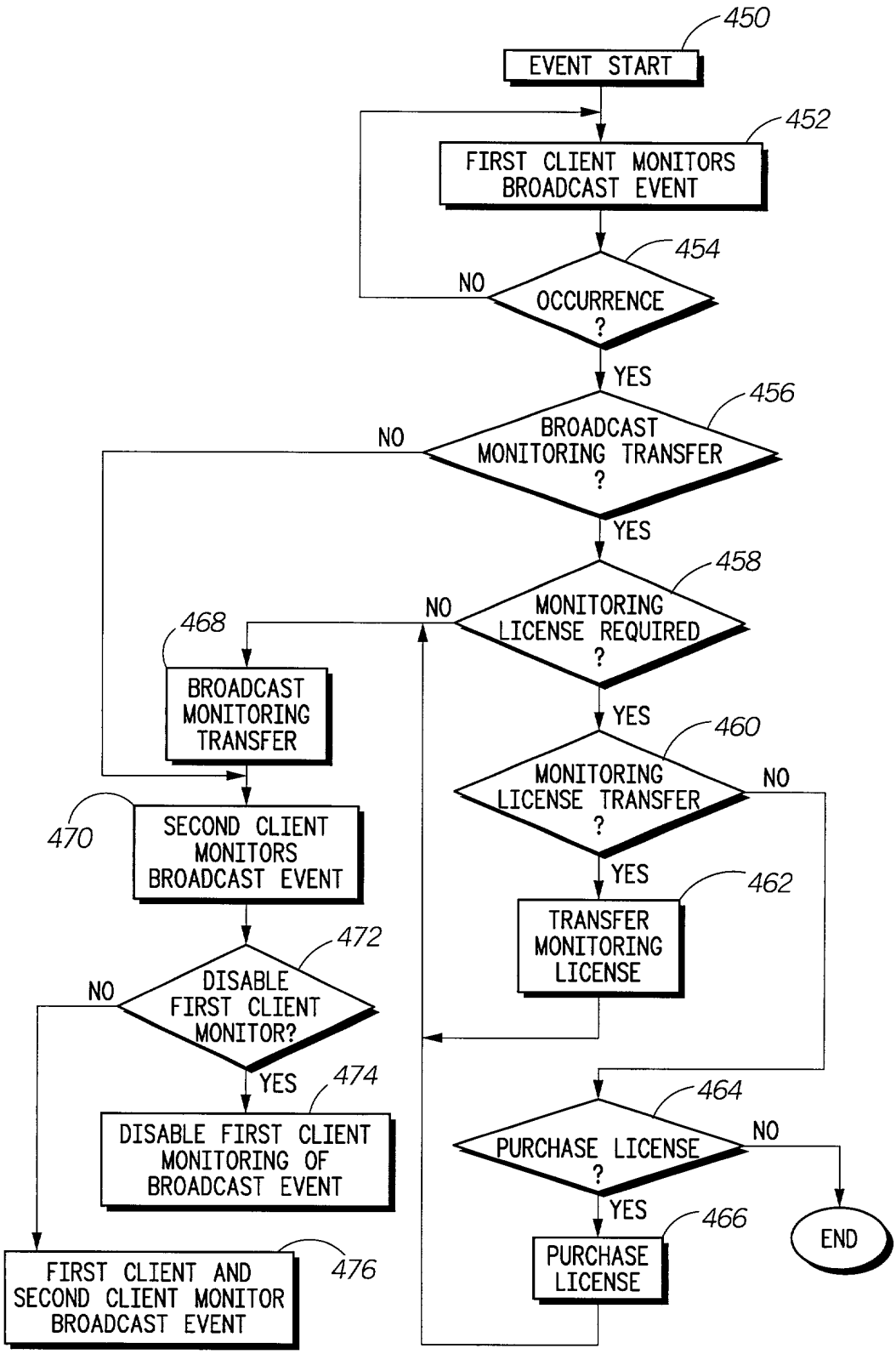
450
EVENT START
452
FIRST CLIENT MONITORS BROADCAST EVENT
454
OCCURRENCE ?
NO
YES
456
BROADCAST MONITORING TRANSFER ?
NO
YES
458
MONITORING LICENSE REQUIRED ?
NO
YES
460
MONITORING LICENSE TRANSFER ?
NO
YES
462
TRANSFER MONITORING LICENSE
464
PURCHASE LICENSE ?
NO
YES
466
PURCHASE LICENSE
END
468
BROADCAST MONITORING TRANSFER
470
SECOND CLIENT MONITORS BROADCAST EVENT
472
DISABLE FIRST CLIENT MONITOR?
NO
YES
474
DISABLE FIRST CLIENT MONITORING OF BROADCAST EVENT
476
FIRST CLIENT AND SECOND CLIENT MONITOR BROADCAST EVENT

FIG. 13

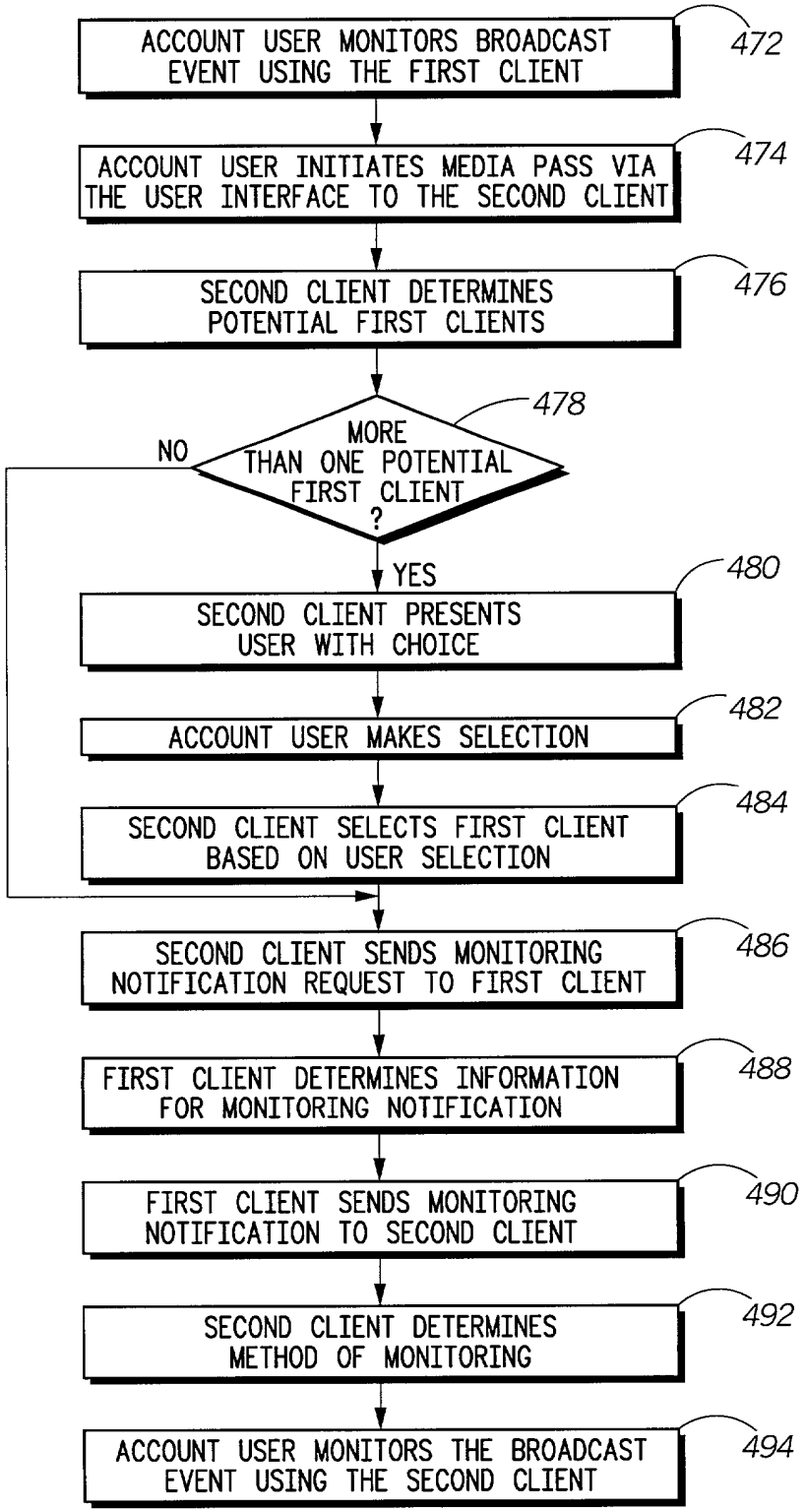
ACCOUNT USER MONITORS BROADCAST EVENT USING THE FIRST CLIENT
472
ACCOUNT USER INITIATES MEDIA PASS VIA THE USER INTERFACE TO THE SECOND CLIENT
474
SECOND CLIENT DETERMINES POTENTIAL FIRST CLIENTS
476
478
MORE THAN ONE POTENTIAL FIRST CLIENT ?
NO
YES
SECOND CLIENT PRESENTS USER WITH CHOICE
480
ACCOUNT USER MAKES SELECTION
482
SECOND CLIENT SELECTS FIRST CLIENT BASED ON USER SELECTION
484
SECOND CLIENT SENDS MONITORING NOTIFICATION REQUEST TO FIRST CLIENT
486
FIRST CLIENT DETERMINES INFORMATION FOR MONITORING NOTIFICATION
488
FIRST CLIENT SENDS MONITORING NOTIFICATION TO SECOND CLIENT
490
SECOND CLIENT DETERMINES METHOD OF MONITORING
492
ACCOUNT USER MONITORS THE BROADCAST EVENT USING THE SECOND CLIENT
494

FIG. 14

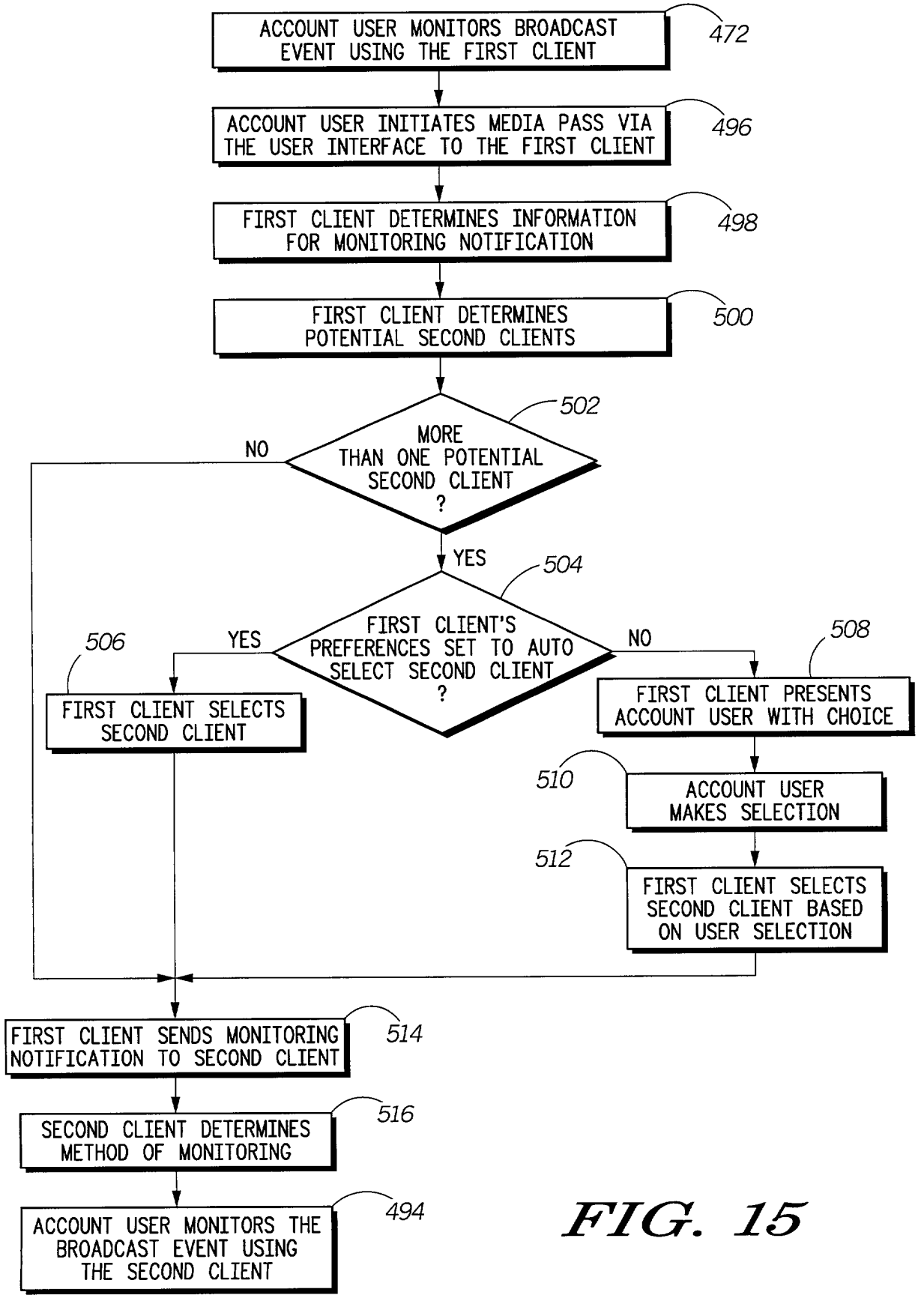
ACCOUNT USER MONITORS BROADCAST EVENT USING THE FIRST CLIENT
472
ACCOUNT USER INITIATES MEDIA PASS VIA THE USER INTERFACE TO THE FIRST CLIENT
496
FIRST CLIENT DETERMINES INFORMATION FOR MONITORING NOTIFICATION
498
FIRST CLIENT DETERMINES POTENTIAL SECOND CLIENTS
500
502
MORE THAN ONE POTENTIAL SECOND CLIENT ?
NO
YES
504
FIRST CLIENT'S PREFERENCES SET TO AUTO SELECT SECOND CLIENT ?
YES
506
FIRST CLIENT SELECTS SECOND CLIENT
NO
508
FIRST CLIENT PRESENTS ACCOUNT USER WITH CHOICE
510
ACCOUNT USER MAKES SELECTION
512
FIRST CLIENT SELECTS SECOND CLIENT BASED ON USER SELECTION
FIRST CLIENT SENDS MONITORING NOTIFICATION TO SECOND CLIENT
514
SECOND CLIENT DETERMINES METHOD OF MONITORING
516
ACCOUNT USER MONITORS THE BROADCAST EVENT USING THE SECOND CLIENT
494

FIG. 15

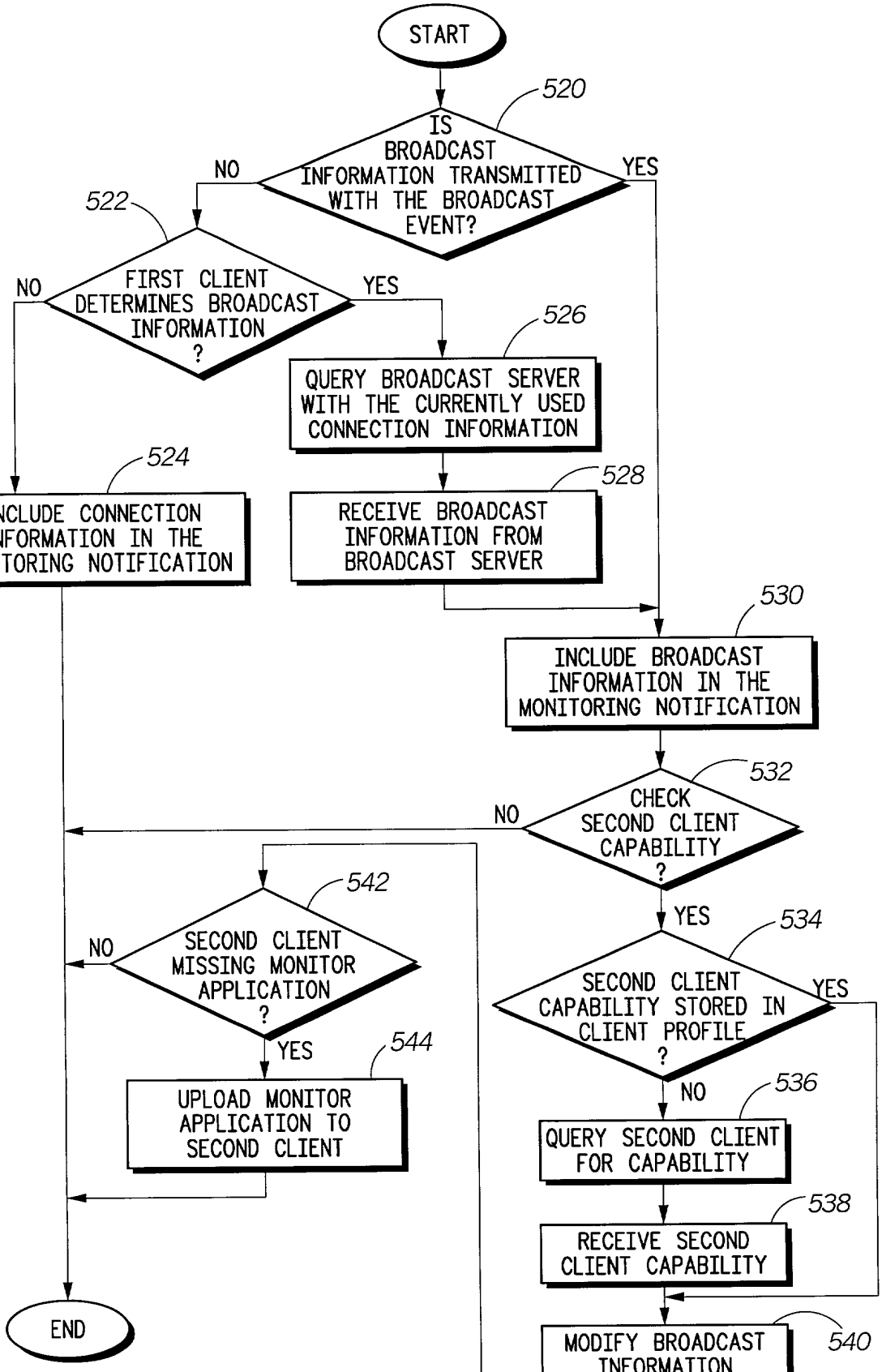
START
520
IS BROADCAST INFORMATION TRANSMITTED WITH THE BROADCAST EVENT?
NO
YES
522
FIRST CLIENT DETERMINES BROADCAST INFORMATION ?
NO
YES
526
QUERY BROADCAST SERVER WITH THE CURRENTLY USED CONNECTION INFORMATION
524
INCLUDE CONNECTION INFORMATION IN THE MONITORING NOTIFICATION
528
RECEIVE BROADCAST INFORMATION FROM BROADCAST SERVER
530
INCLUDE BROADCAST INFORMATION IN THE MONITORING NOTIFICATION
532
CHECK SECOND CLIENT CAPABILITY ?
NO
YES
542
SECOND CLIENT MISSING MONITOR APPLICATION ?
NO
YES
544
UPLOAD MONITOR APPLICATION TO SECOND CLIENT
534
SECOND CLIENT CAPABILITY STORED IN CLIENT PROFILE ?
YES
NO
536
QUERY SECOND CLIENT FOR CAPABILITY
538
RECEIVE SECOND CLIENT CAPABILITY
540
MODIFY BROADCAST INFORMATION
END

FIG. 16

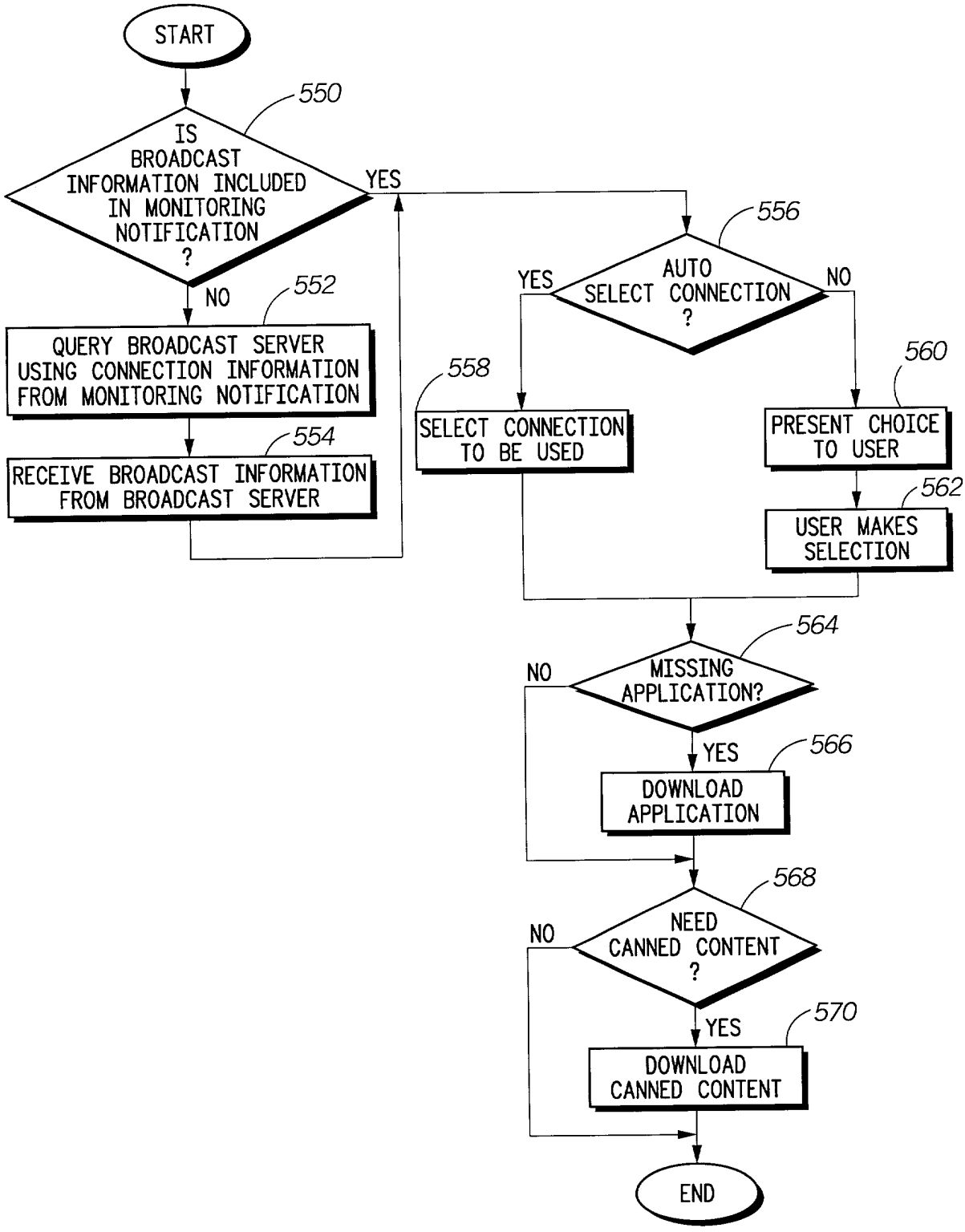
START
550
IS BROADCAST INFORMATION INCLUDED IN MONITORING NOTIFICATION ?
YES
NO
552
QUERY BROADCAST SERVER USING CONNECTION INFORMATION FROM MONITORING NOTIFICATION
554
RECEIVE BROADCAST INFORMATION FROM BROADCAST SERVER
556
AUTO SELECT CONNECTION ?
YES
NO
558
SELECT CONNECTION TO BE USED
560
PRESENT CHOICE TO USER
562
USER MAKES SELECTION
564
MISSING APPLICATION?
NO
YES
566
DOWNLOAD APPLICATION
568
NEED CANNED CONTENT ?
NO
YES
570
DOWNLOAD CANNED CONTENT
END

FIG. 17